

research and utilize large portions of land in their unique agricultural role. Proximity to Raleigh and the Research Triangle Park will positively influence the Clayton area as development continues.

Commercial development in Clayton is located mainly along US 70, NC 42, and Main Street. The downtown area is peppered with specialty shops owned and operated by local citizens. Highway retail businesses, typical to major highways, line the US 70 corridor. Although construction of the proposed US 70 Bypass of Clayton will remove much of the through traffic from the heart of Clayton, the area is expected to generate enough internal traffic to strengthen the existing commercial development both in the downtown area and along existing US 70. Internal traffic, generated by local travel, is expected to double to 95,000 trips per day by the year 2010.

The US 70 Bypass of Clayton is expected to have a significant affect on development trends in the area. Convenience of travel will be a key factor in attracting commuters to the Clayton area after completion of the bypass. Commercial and industrial developers will also take advantage of the exposure that a facility of this type provides. As shown in Figure 3, new commercial development is expected to migrate to the interchanges, industrial development should continue in the southeastern portion of the area, and residential development should continue to the south.

Traffic Accidents

Traffic accident analysis is a serious and important consideration in a thoroughfare plan development. The source of traffic accidents can be broken down into three general categories. The first is the physical environment including such things as road condition, weather, road obstructions, and traffic conditions. The second source is associated with the driver. This includes the driver's mental alertness, distractions in the car, ability to handle the vehicle, and reaction time. The third source is associated with the physical attributes of the vehicle itself. This would include such things as the condition of the brakes and tires, vehicle responsiveness, size of the vehicle, and how well the windshield wipers and defroster work. All traffic accidents can be attributed to one or more of these sources; however, the driver is often the primary source.

Accident data for January 1987 through December 1989 was studied as part of the development of the Thoroughfare Plan. The segment of US 70 that intersects Boling and Main Streets has a very high accident count. A reduction in the complexity of this intersection, as shown on the Thoroughfare Plan, will decrease potential traffic conflict, which should provide a safer environment for intersection maneuvers. Table 2 lists the locations where accidents frequently occur. The majority of these are rear-end type collisions.